

WHAT IS CLAIMED IS

1. A method for manufacturing a length of six-link rope chain, comprising:

providing a material comprising a precious metal;

forming generally C-shaped link elements from said material to define a gap between facing ends thereof, each link element having an axis, a first major surface perpendicular to said axis, an opposite second major surface perpendicular to said axis, an interior edge, and an exterior edge having at least a flat linear surface portion parallel to said axis, said parallel portion being smooth and highly light reflective; and

assembling a plurality of said link elements to produce a length of six-link rope chain.

2. The method as claimed in Claim 1, wherein:

transitions between said major surfaces and said exterior edge define corners; and

in forming said link elements, at least one corner is rounded.

3. The method as claimed in Claim 1, wherein:

said material is a sheet of material having a plurality of regions, adjacent ones of which exhibit different visual properties; whereby

link elements formed from said sheet of material comprises a plurality of regions, adjacent ones of which exhibit different visual properties.

4. The method as claimed in Claim 3, wherein said different visual properties are selected from the group consisting of different colors, different surface textures, different reflectivities, different materials, different gold karat

weights, different shapes, different patterns, different sizes, and different designs.

5. The method as claimed in Claim 4, wherein:

said different visual properties are different surface textures; and

forming said link element includes forming at least one of said regions of different surface textures employing at least one process selected from the group consisting of serrating, scoring, knurling, lining, patterning, pressure stamping, impressing, sandblasting, etching, shaping, polishing, matting, frosting, and diamond cutting.

6. The method as claimed in Claim 4, wherein:

said regions of different visual properties include regions of different surface textures superimposed on said regions of different colors; and

forming said link element includes forming at least one of said regions of different surface textures employing at least one process selected from the group consisting of serrating, scoring, knurling, lining, patterning, pressure stamping, impressing, sandblasting, etching, shaping, polishing, matting, frosting, and diamond cutting.

7. The method as claimed in Claim 4, wherein:

said regions of different visual properties include regions of different surface textures superimposed on said regions of different reflectivities; and

forming said link element includes forming at least one of said regions of different surface textures employing at least one process selected from the group consisting of serrating, scoring, knurling, lining, patterning, pressure stamping, impressing, sandblasting, etching, shaping, polishing, matting, frosting, and diamond cutting.

8. The method as claimed in Claim 4, wherein:

said regions of different visual properties include regions of different surface textures superimposed on said regions of different materials; and

forming said link element includes forming at least one of said regions of different surface textures employing at least one process selected from the group consisting of serrating, scoring, knurling, lining, patterning, pressure stamping, impressing, sandblasting, etching, shaping, polishing, matting, frosting, and diamond cutting.

9. The method as claimed in Claim 1, wherein:

said at least one link element is formed with a varying cross section along the extent of such link element.

10. The method as claimed in Claim 9, wherein:

a cross section of said link element at a first location along the extent of said link element is of a first configuration;

a cross section of said link element at a second location along the extent of said link element is of a second configuration; and

the cross section of said link continuously changes along its extent from said first location to said second location.

11. The method as claimed in Claim 9, wherein:

a cross section of said link element at a first location along the extent of said link element is of a first configuration;

a cross section of said link element at a second location along the extent of said link element is of a second configuration; and

the cross section of said link changes in discrete stages along its extent from said first location to said second location.

12. The method as claimed in Claim 1, comprising:  
treating said exterior edge to have enhanced reflectivity.
13. The method as claimed in Claim 3, wherein:  
forming a link element from said material includes stamping said sheet of material with a stamping device.
14. The method as claimed in Claim 1, wherein:  
said material is a sheet of material;  
said at least one link element is stamped from said sheet of material in a stamping procedure; and  
at least a portion of said link element has a textured surface formed during said stamping procedure.
15. A length of six-link jewelry rope chain manufactured by the method as claimed in Claim 1.
16. A length of jewelry rope chain constructed of a plurality of link elements assembled to form a length of six-link rope chain, wherein each of said link elements has an axis and is generally C-shaped in configuration to define a gap between facing ends thereof, at least one of said link elements comprises:  
a first major surface perpendicular to said axis;  
an opposite second major surface perpendicular to said axis;  
an interior edge; and  
an exterior edge having at least a flat linear surface portion parallel to said axis, said parallel portion being smooth and highly light reflective.
17. The length of jewelry rope chain as claimed in Claim 16, wherein:

18. The length of jewelry rope chain as claimed in Claim 17, wherein said different visual properties are selected from the group consisting of different colors, different surface textures, different reflectivities, different materials, different gold karat weights, different shapes, different patterns, different sizes, and different designs.

20. The length of jewelry rope chain as claimed in Claim 17, wherein:

at least one of said regions of different surface textures is formed therein by employing at least one process selected from the group consisting of serrating, scoring, knurling, lining, patterning, pressure stamping, impressing, sandblasting, etching, shaping, polishing, matting, frosting, and diamond cutting.

21. The length of jewelry rope chain as claimed in Claim 17,  
wherein:

a cross section of said at least one link element at a second location along the extent of said at least one link element is of a second configuration; and

25. The length of jewelry rope chain as claimed in Claim 23, wherein:

a cross section of said at least one link element at a second location along the extent of said at least one link element is of a second configuration; and

26. The length of jewelry rope chain as claimed in Claim 16, wherein:

27. The length of jewelry rope chain as claimed in Claim 16, wherein:

at least a portion of said link element has a textured surface formed during said stamping procedure.

providing an elongated strip of material having a prescribed length, width, and thickness;

forming said strip into a generally C-shaped rope chain link element to define a gap between facing ends thereof, said

assembling a plurality of said link elements to form a length of six-link rope chain.

providing a sheet of material having a plurality of regions, adjacent ones of which exhibit different visual properties; and

30. The method as claimed in Claim 29, comprising:

31. The method as claimed in Claim 29, wherein:

32. The method as claimed in Claim 29, wherein said different visual properties are selected from the group consisting of different colors, different surface textures, different reflectivities, different materials, different gold karat



33. The method as claimed in Claim 32, wherein providing said strip of material includes texturing at least one of said regions by employing at least one process selected from the group consisting of serrating, scoring, knurling, lining, patterning, pressure stamping, impressing, sandblasting, etching, shaping, polishing, matting, frosting, and diamond cutting.

35. The method as claimed in Claim 28, comprising:  
forming a textured surface on at least a portion of said  
link element in a stamping operation.

37. A length of jewelry rope chain comprising a series of tightly interfitting gapped link elements and having the appearance of intertwining first and second helical rope strands, wherein:

38. The length of jewelry rope chain as claimed in Claim 37, wherein at least one of said gapped link elements is generally C-shaped and comprises:

a first major surface; and

another portion of said link element has a second link thickness less than said first link thickness.

a major surface of said link element portion having said second link thickness is textured.

at least one other portion of said link element has a link thickness less than that of said first or second link thickness.

said different visual properties are selected from the group of visual properties consisting of color, texture, and karat weight;

the other of said helical strands exhibits at least one visual property selected from the group consisting of color, texture, and karat weight different than that of said first strand.

42. The length of jewelry rope chain as claimed in Claim 37,  
wherein:

first and second helical channels are defined at the transition between said intertwined first and second helical rope strands;

each channel has two sides which include respective portions of adjacent ones of said first and second rope strands; and

one side of one channel exhibits a visual property different than the other side of said one channel.

43. The length of jewelry rope chain as claimed in Claim 37, wherein:

first and second helical channels are defined at the transition between said intertwined first and second helical rope strands;

each channel has two sides which include respective portions of adjacent ones of said first and second rope strands; and

one side of one channel exhibits a visual property different than the rest of the length of rope chain.

44. The length of jewelry rope chain as claimed in Claim 37, wherein:

first and second helical channels are defined at the transition between said intertwined first and second helical rope strands;

each channel has two sides which include respective portions of adjacent ones of said first and second rope strands; and

both sides of one channel exhibit visual properties different than the rest of the length of rope chain.

45. The length of jewelry rope chain as claimed in Claim 37, wherein:

first and second helical channels are defined at the transition between said intertwined first and second helical rope strands;

each channel has two sides which include respective portions of adjacent ones of said first and second rope strands; and

one side of both channels exhibits visual properties different than the rest of the length of rope chain.

46. The length of jewelry rope chain as claimed in Claim 37, wherein:

the most outwardly portions of said first and second helical rope strands are defined, respectively, as first and second helical outer periphery regions; and

said first periphery region exhibits a visual property different than that of the rest of the length of rope chain.

47. The length of jewelry rope chain as claimed in Claim 37, wherein:

said gapped link elements have a generally rectangular C-shaped configuration with two spaced apart long sides joined by two spaced apart short ends, a gap located at one of said short ends; and

one of said long sides has a textured surface.

48. The length of jewelry rope chain as claimed in Claim 37, wherein said gapped link elements are generally square in shape, having two spaced apart straight sides joined by two spaced apart straight ends, a gap located at one of said ends; and

one of said straight sides has a textured surface.

49. The length of jewelry rope chain as claimed in Claim 37, wherein said gapped link elements are generally square in shape, having two spaced apart straight sides joined by two

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spaced apart straight ends, a gap located at one of said ends;  
and

one of said straight sides has a link width greater than  
that of the other of said straight sides.

50. The length of jewelry rope chain as claimed in Claim 37,  
wherein:

said gapped link elements are generally oval in shape,  
having two spaced apart long curved sides and two spaced apart  
short curved ends, a gap located at one of said short ends;  
and

one of said long sides has a textured surface.

51. The length of jewelry rope chain as claimed in Claim 37,  
wherein:

said gapped link elements are generally diamond-shaped,  
having two spaced apart angled sides and two spaced apart  
angled ends, a gap located at one of said angled ends; and  
one of said angled sides has a textured surface.

52. The length of jewelry rope chain as claimed in Claim 37,  
wherein:

said gapped link elements are generally heart-shaped,  
having two spaced apart curved sides and two spaced apart  
ends, said ends having, respectively, an outwardly directed  
apex and an inwardly directed inverted apex, a gap located at  
said end with the outwardly directed apex; and

one of said sides is textured.

53. The length of jewelry rope chain as claimed in Claim 37,  
wherein:

each of said gapped link elements has a first major  
surface, an opposite second major surface, an interior edge,  
and an exterior edge; and

54. The length of jewelry rope chain as claimed in Claim 53, wherein said link elements are assembled to configure a rope chain having an axis, and wherein the visual properties of said rope strands differ from one another when viewed in a first axial direction, and at least one of said strands differs in visual properties when viewed in said first axial direction as compared to that as viewed in the opposite, second, axial direction.

a first link layer having the shape and configuration of said link elements, but with half the link thickness defined as the distance between said first major surface and said second major surface of said link element; and

said two link layers are joined together by bonding one major surface of said first link layer with a major surface of said second link layer to form said link element; and

56. The length of jewelry rope chain as claimed in Claim 37, wherein each of said gapped link elements is generally C-shaped in configuration to define a gap between facing ends thereof, and at least one of said gapped link elements comprises:

a first major surface;

an opposite second major surface;

an interior edge; and

an exterior edge; wherein:

a heel portion of said link element is defined as that portion directly opposite said gap;

a link arm is defined as a part of the link element between either one of said facing ends and said heel portion;

the exterior edge of one of said arms has scalloped segments; and

the exterior edge of the other of said arms is smooth and absent scalloped segments.

57. The length of jewelry rope chain as claimed in Claim 56, wherein:

at least one scalloped segment has a textured surface.

58. The length of jewelry rope chain as claimed in Claim 57, wherein said textured surface is a major surface of said link element.

59. The length of jewelry rope chain as claimed in Claim 57, wherein said textured surface is the exterior edge of said scalloped segment.

- 60. The length of jewelry rope chain as claimed in Claim 57, wherein one scalloped segment is textured differently than other scalloped segments.

61. The length of jewelry rope chain as claimed in Claim 37, wherein each of said gapped link elements is generally C-shaped in configuration to define a gap between facing ends thereof, and at least one of said gapped link elements comprises:

a first major surface;

an opposite second major surface;

an interior edge; and  
 an exterior edge; wherein:

a heel portion of said link element is defined as that portion directly opposite said gap;

a link arm is defined as a part of the link element between either one of said facing ends and said heel portion; and

the link width of one of said arms progressively increases from said gap toward the center of said one arm, progressively increases from said heel toward said arm center, and decreases in the vicinity of said arm center.

62. The length of jewelry rope chain as claimed in Claim 61, wherein the other of said arms is textured on at least one of said first major surface, second major surface, and exterior edge.

63. The length of jewelry rope chain as claimed in Claim 37, wherein each of said gapped link elements is generally C-shaped in configuration to define a gap between facing ends thereof, and at least one of said gapped link elements comprises:

a first major surface;  
 an opposite second major surface;  
 an interior edge; and  
 an exterior edge; wherein:

a heel portion of said link element is defined as that portion directly opposite said gap;

a link arm is defined as a part of the link element between either one of said facing ends and said heel portion; and

the exterior edge of said link element is shaped to reduce link width on a portion of said link element at the location of said heel.

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65. The length of jewelry rope chain as claimed in Claim 37, wherein each of said gapped link elements is generally C-shaped in configuration to define a gap between facing ends thereof, and at least one of said gapped link elements comprises:

an opposite second major surface;

an exterior edge; wherein:

a link arm is defined as a part of the link element between either one of said facing ends and said heel portion; and

66. The length of jewelry rope chain as claimed in Claim 65, wherein link width is decreased at the arm center of the other arm.

68. The length of jewelry rope chain as claimed in Claim 37, wherein each of said gapped link elements is generally C-shaped in configuration to define a gap between facing ends

thereof, and at least one of said gapped link elements comprises:

- a first major surface;
- an opposite second major surface;
- an interior edge; and
- an exterior edge; wherein:

a heel portion of said link element is defined as that portion directly opposite said gap;

a link arm is defined as a part of the link element between either one of said facing ends and said heel portion; and

the exterior edge of said link element is shaped to reduce link width on a portion of said link element at a location on one of said arms between said gap and the center of said one arm.

69. The length of jewelry rope chain as claimed in Claim 68, wherein said one arm is textured at a location between said heel and said one arm center.

70. The length of jewelry rope chain as claimed in Claim 68, wherein the other one of said arms is shaped to reduce link width on a portion of said link element at a location on the other one of said arms between said heel and the center of said other arm.

71. The length of jewelry rope chain as claimed in Claim 70, wherein:

said link element is textured on a major surface at one of said arm locations; and

said link element is textured on the exterior surface of the other of said arm locations.

72. The length of jewelry rope chain as claimed in Claim 37, wherein each of said gapped link elements is generally C-

shaped in configuration to define a gap between facing ends thereof, and at least one of said gapped link elements comprises:

- a first major surface;
- an opposite second major surface;
- an interior edge; and
- an exterior edge; wherein:

a heel portion of said link element is defined as that portion directly opposite said gap;

a link arm is defined as a part of the link element between either one of said facing ends and said heel portion;

at least one of said arms has a single flat surface formed on its exterior edge parallel to a line passing through said gap and said heel; and

at least one of said flat surface and a major surface in the vicinity of said flat surface is textured.

73. The length of jewelry rope chain as claimed in Claim 72, wherein:

- a single flat surface is formed on both said arms; and
- at least one of said flat surfaces is textured.

74. The length of jewelry rope chain as claimed in Claim 37, wherein each of said gapped link elements is generally C-shaped in configuration to define a gap between facing ends thereof, and at least one of said gapped link elements comprises:

- a first major surface;
- an opposite second major surface;
- an interior edge; and
- an exterior edge; wherein:

a heel portion of said link element is defined as that portion directly opposite said gap;

a link arm is defined as a part of the link element between either one of said facing ends and said heel portion;

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at least one major surface of at least one of said arms  
is textured.

a first major surface;  
an opposite second major surface;  
an interior edge; and  
an exterior edge; wherein:

a link arm is defined as a part of the link element between either one of said facing ends and said heel portion;

one of said straight portion and said semi-circular portion is textured.

a first major surface;  
an opposite second major surface;  
an interior edge; and  
an exterior edge; wherein:

at least one major surface of said one arm is textured.

a first major surface;  
an opposite second major surface;  
an interior edge; and  
an exterior edge; wherein:

a plurality of flat surfaces are formed on said exterior edge of one of said arms superimposed over said textured exterior edge.

a first major surface;

an opposite second major surface;

an interior edge; and

an exterior edge; wherein:

a heel portion of said link element is defined as that portion directly opposite said gap;

a link arm is defined as a part of the link element between either one of said facing ends and said heel portion;

said link element is annular with a substantially circular cross section;

a plurality of flat surfaces are formed on said exterior edge of one of said arms; and

said plurality of flat surfaces are arranged in serial fashion along the extent of the exterior edge of said one arm with little or no space between said flat surfaces.

79. A length of jewelry rope chain comprising a series of tightly interfitting gapped link elements and having the appearance of intertwining first and second helical rope strands, wherein:

at least one of said first and second helical strands exhibits multiple visual properties.

80. The length of jewelry rope chain as claimed in Claim 79, wherein:

first and second helical channels are defined between said intertwined first and second helical rope strands;

each channel has two sides which include respective portions of adjacent ones of said first and second rope strands; and

one side of one channel exhibits a visual property different than the other side of said channel.

81. The length of jewelry rope chain as claimed in Claim 79, wherein:

one side of one channel exhibits a visual property the same as that of the other side of said one channel.

one side of one channel exhibits a visual property different than the rest of the length of rope chain.

both sides of one channel exhibit visual properties different than the rest of the length of rope chain.

each channel has two sides which include respective portions of adjacent ones of said first and second rope strands; and

first and second helical outer periphery regions are defined on the most outwardly portion of said first and second helical rope strands, respectively;



said helical outer periphery regions and said channel sides exhibit combinations of visual properties selected from the group consisting of different colors, different surface textures, different reflectivities, different materials, different gold karat weights, different shapes, different patterns, different sizes, and different designs.

rolling said length of material about a line parallel to said axis and into a generally cylindrical shape with said side edges facing one another across a gap parallel to said sides;

assembling a plurality of said link elements to produce a length of rope chain.

a first major surface;

an exterior edge; wherein

link width is defined as the distance between said interior and said exterior edges at any point along the extent of said link element;

said exterior edge is formed with shape variations to enhance the outward appearance of said length of rope chain; and

said interior edge is formed with shape variations to reduce the amount of precious metal used in the manufacture of said at least one link element.

91. The length of jewelry rope chain as claimed in Claim 90, wherein:

said interior and exterior shape variations are complementary at said heel portion to maintain a prescribed length width at said heel portion.

92. The length of jewelry rope chain as claimed in Claim 90, wherein said interior and exterior shape variations are complementary at said gap portion to maintain a prescribed link width of said facing ends at the location of said gap.

93. The length of jewelry rope chain as claimed in Claim 90,  
wherein:

said interior edge is formed with a void at said heel portion; and

said exterior edge is formed with an outwardly directed extended portion at said heel portion at a location opposite said void to maintain a prescribed minimum link width at said heel portion.

a link arm is defined as a part of said link element between either one of said facing ends and said heel portion, a center of a link arm being midway between said gap and said heel portion;

said interior edge of said one link arm is shaped to reduce the link width at said one link arm center.

providing first link elements that are, at least partially, hollow;

assembling said first and second link elements to form a rope chain.

providing said first link elements as part hollow and  
part solid;

assembling said first and second link elements to form a rope chain.

providing said first link elements as part hollow and  
part solid;

providing said second link elements as wholly hollow; and  
assembling said first and second link elements to form a  
rope chain.

98. The method as claimed in Claim 95, comprising:

providing said first link elements as part hollow and part solid;

providing said second link elements as wholly solid; and

assembling said first and second link elements to form a rope chain.

99. The method as claimed in Claim 95, comprising:

in providing said first or second link elements which are at least in part solid, forming a solid portion of such link elements to have an exterior edge extending laterally farther outwardly from an axis of said length of rope chain than any hollow portion; and

diamond cutting an assembled length of rope chain in a desired pattern and at a depth such that the outer periphery of said solid portion is diamond cut, and the outer periphery of said hollow portion is either not cut or is only slightly cut without penetration through said hollow portion to the interior of said hollow portion.

100. The method as claimed in Claim 95, wherein:

said first link elements are provided as fully hollow in cross section;

said second link elements are provided as fully solid in cross section; and

said assembling operation comprises continuously assembling, alternately, a plurality of hollow link elements followed by a plurality of solid link elements, to form a rope chain.

101. A method for manufacturing a length of jewelry rope chain, comprising:

providing a length of material having side-by-side adjacent elongated regions exhibiting different visual properties;

assembling a plurality of said link elements to produce a length of rope chain.

assembling a plurality of said link elements to produce a length of rope chain.

104. The method as claimed in Claim 103, wherein:

each said visual property is selected from the group consisting of different colors, different textures, and different materials.

Country	Year	Value	Unit
Algeria	1970	1.00	1000
Algeria	1971	1.00	1000
Algeria	1972	1.00	1000
Algeria	1973	1.00	1000
Algeria	1974	1.00	1000
Algeria	1975	1.00	1000
Algeria	1976	1.00	1000
Algeria	1977	1.00	1000
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